

## Patent claims

1           1. A reactor bottom (2) of a reactor (1)  
2           with a collecting funnel (7) formed with an upper side  
3           (5),  
4           with a receiving opening (15) formed in the collecting  
5           funnel (7) and which connects to an outlet passage (18) extending  
6           through the reactor bottom (2),  
7           and with a closure part (16) for the harvesting opening  
8           (15) which is movably arranged in the reactor bottom (2) and  
9           displacable between a closed position in which it closes the  
10          harvesting opening (17) of the collecting funnel (7), and a  
11          discharge position in which it is lowered in the reactor bottom (2)  
12          and establishes a connecting between the harvesting opening (15)  
13          and the outlet passage (18).

1           2. The reactor bottom according to claim 1 characterized  
2           in that the surface (17) of the closure part (16) is configured as  
3           a guide or baffle surface for guiding the reactor content from the  
4           harvesting opening (15) into the outlet passage (18).

1           3. The reactor bottom according to claim 1 or 2  
2           characterized in that the surface (17) of the closure part (16)  
3           forms a collecting region (26) at a deep lying level whereby the  
4           collecting region (26) in the lowered discharge position of the  
5           closure part (16) is juxtaposed with the outlet passage (18).

1           4. The reactor bottom according to claim 3 characterized  
2 in that the collecting region (26) on the surface (17) of the  
3 closure part (16) is configured with a point shape or line shape.

1           5. The reactor bottom according to one of the claims 1 -  
2 4 characterized in that the harvesting opening (15) is located  
3 eccentrically to the central axis (6) of the collecting funnel (7)  
4 and especially the edge of the harvesting opening (15) coincides  
5 with the central axis (6) of the collecting funnel (7).

1           6. The reactor bottom according to one of claims 1 - 5  
2 characterized in that the surface (17) of the closure part (16) is  
3 inclined with respect to the central axis (6) or is domed.

1           7. The reactor bottom according to one of claims 1 - 6  
2 characterized in that the surface (17) of the closure part (16) is  
3 flush in its closed position to the surface of the collecting  
4 funnel (7).

1           8. The reactor bottom according to one of claims 1 - 7  
2 characterized in that an outlet recess extends in the reactor  
3 bottom (2) from the harvesting opening (15) and is especially  
4 parallel to the central axis (6) of the collecting funnel (7) and  
5 receives the closure part (16) slidably and at least one outlet  
6 passage (18) opens into the outlet recess (13).

1           9. The reactor bottom according to claim 8 characterized  
2 in that an annular groove (25) is formed in the wall (14) of the  
3 outlet recess (13) and/or a plurality of openings are formed  
4 therein, which communicate with the outlet passage (18).

1           10. The reactor bottom according to one of claims 1 - 9  
2 characterized in that at least one discharge passage (23) opens  
3 into the collecting funnel (7) and is closed with a sieve (24).

1           11. The reactor bottom according to one of claims 1 - 10  
2 characterized in that the reactor bottom (2) is formed in one piece  
3 with the reactor (1) or the reactor wall (11) or that the reactor  
4 (1) or the reactor wall (11) is detachably connected to the reactor  
5 bottom (2) and is fixed on the upper side (5) of the reactor bottom  
6 (2) such that the reactor wall (11) surrounds the collecting funnel  
7 (7).

1           12. The reactor bottom according to one of claims 1 - 11  
2 characterized in that the closure part (16) is displaceable manually  
3 or by means of a drive device (20, 21, 22) arranged on the reactor  
4 bottom (2).

1           13. The reactor bottom according to one of claims 1 - 12  
2 characterized in that the funnel or conical angle of the collecting  
3 funnel (7) is substantially 130° to 170°, especially 153°.

1           14. A method of separating a phase from a phase mixture  
2 in a reactor with a reactor bottom according to one of claims 1 -  
3 13 whereby the phase mixture is introduced into the reactor, the  
4 phases are separated and in the closed position of the closure  
5 part, deposits on the collecting funnel and then a connection is  
6 opened between the harvesting opening and the outlet passage  
7 whereby the desired phase is discharged through the harvesting  
8 opening and the outlet passage of the reactor.

1           15. The method according to claim 14 characterized in  
2 that the phase mixture is a mixture of solid and liquid phases and  
3 the phase separation is carried by sedimentation.

1           16. The method according to claim 14 or 15 characterized  
2 in that the phase mixture is a hardening bath and capsules are  
3 contained in the hardening bath as the phase to be separated.

1           17. The method according to claim 16 characterized in  
2 that especially before the withdrawal of the capsule in a further  
3 method step the hardening bath is discharged through the discharge  
4 passage and rinsing liquid is introduced into the reactor and is  
5 then discharged through the discharge passages, this method step  
6 being carried out once or a number of times.

1           18. The method according to claim 16 or 17 characterized  
2 in that the capsules are sodium cellulose capsules.

1           19. The method according to one of claims 16 - 18  
2 characterized in that the capsules contain biological cells,  
3 especially animal, human or plant cells.